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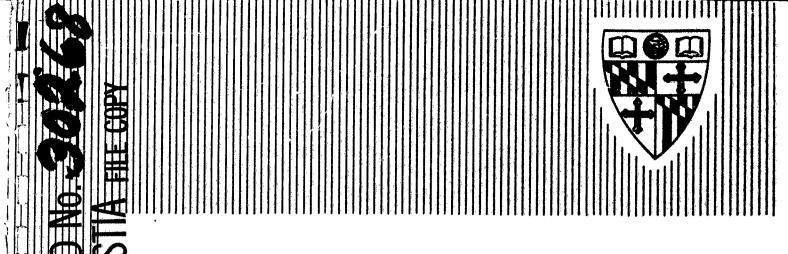
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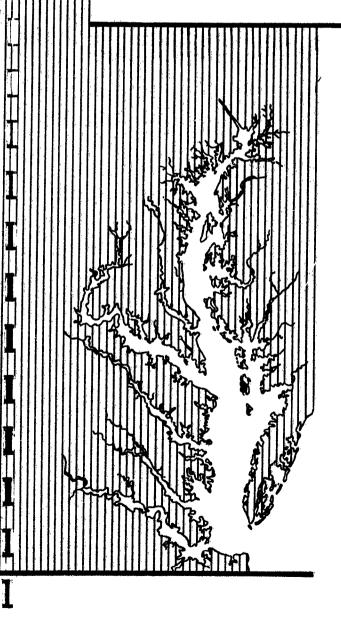
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THE CHESAPEAKE BAY INSTITUTE of The Johns Hopkins University



DATA REPORT 18

CRUISE XII

15 July - 6 August 1952

Reference 54-5 April 1954

CHESAPEAKE BAY INSTITUTE THE JOHNS HOPKINS UNIVERSITY

DATA REPORT 18

Cruise XII 15 July - 6 August 1952

This report contains results of work carried out for: the Office of Naval Research of the Navy Department under research project NR 083-016, Contract Nonr 248(20), and research project NR 083-070, Contract Nonr 248(30); the State of Maryland (Department of Research and Education); and the Commonwealth of Virginia (Virginia Fisheries Laboratory).

April 1954 Reference 54-5 D. W. Pritchard Director The data contained in this report were collected in the Chesapeake Bay area during the period 15 July to 6 August 1952.

The purpose of this cruise was to continue the study of the physical and chemical structure of the area.

The presentation of data in this report does not constitute publication and the information may be subject to modification at a later date.

Location of Stations

The stations are designated by the numerical-alphabetical system described in Data Report 12, reference 52-21.

Observations

Current speed and direction were measured with the confined submerged drags described in Chesapeake Bay Institute Technical Report No. 1.

Temperature and salinity were determined by means of the Conductivity-Temperature-Indicator (CTI). (See Data Report 13, reference 53-4.)

Oxygen was determined by the modified Winkler titration method.

pH was determined with a Beckman pH meter.

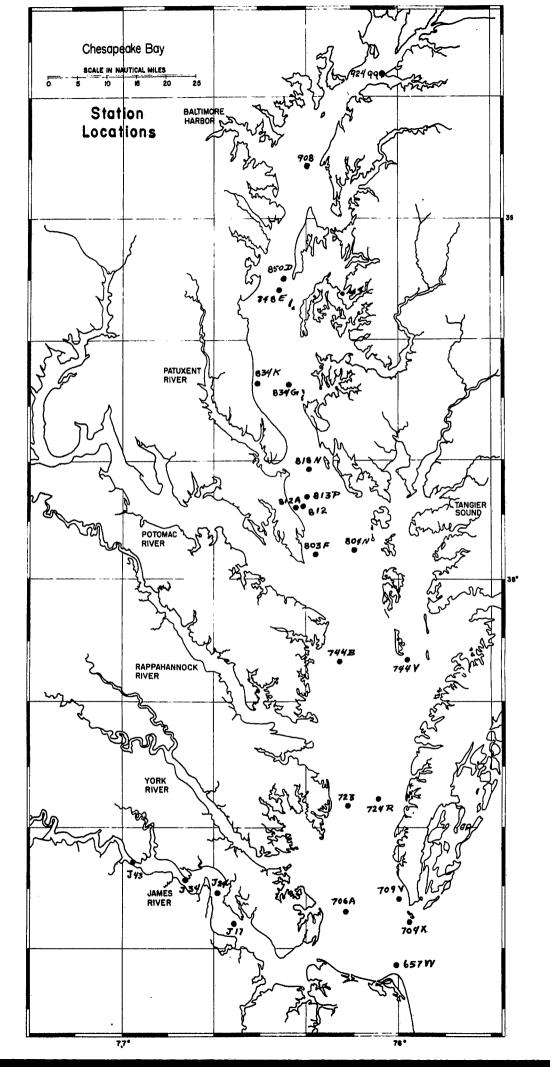
Turbidity, inorganic phosphate, and chlorophyll were determined by the methods outlined in Data Report 12, reference 52-21.

Alkalinity was determined by the method found in <u>Industrial</u> and <u>Engineering Chemistry</u>, Analytical Edition, Volume 18, No. 12, 1946.

Wind force is given in Beaufort scale units.

Weather is reported in the following code:

Code	Description
00	Cloudless (from no clouds up to 1/10 coverage)
01	Partly cloudy (from 1/10 to 5/10)
02	Cloudy (over 5/10 up to 9/10)
03	Overcast (over 9/10)
04	Low fog, on ground or at sea
05	Haze
07	Distant lightning
10	Precipitation within sight
11	Thunder, without precipitation
13	Ugly, threatening sky
14	Squally weather
16	Waterspout seen
19	Signs of tropical storm
40	Fog
49	Fog in patches
51	Intermittent drizzle
52	Continuous drizzle
57 58	Drizzle and fog
58	Drizzle and rain, mixed
61	Intermittent rain
62	Continuous rain
67	Rain and fog
69	Rain and snow, mixed
71	Intermittent snow (in flakes)
72	Continuous snow (in flakes)
77	Snow and fog
78	Frozen drizzle (grains of snow)
79	Ice crystals or frozen raindrops
81	Rain showers
83	Snow showers
88	Hail, or rain and hail showers
93	Thunderstorm, with rain (or snow) but without hail
94	Thunderstorm, with hail
97	Heavy thunderstorm



Section A
Salinity, Temperature, Current and Meteorological Data

657W 23 July		pth 58'	Wind	mer 00 W-1 51.1°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Curr Dir (°T)	cent Speed (kts)
0 5 10 15 20 25 30 35 40 45 50	29.70 28.09 25.24 20.85 19.04 19.34 18.88 18.62 17.50 17.00 16.98 16.98	19.48 20.94 23.39 28.60 29.75 29.94 30.19 30.15 30.65 30.66	285 283 295 305 304 303 303 290 280 282 272	0.48 0.50 1.05 1.32 1.13 1.21 1.21 1.21 1.01 0.92 0.87

657W 23 July		100 EST epth 57'	Weat Wind Air	
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30 35 40 45 50			274 274 284 284 284 284 284 274 274 274	0.58 0.87 0.92 1.09 0.96 0.96 1.01 0.92 0.77 0.87

704X 23 July		227 EST epth 48'	Win	ther 05 d S-1 32.8°C
:	Mawn	Sal	Cur: Dir	rent
Depth (ft)	Temp (°C)	(0/00)	(°T)	Speed (kts)
0	29.40	22.76	081	1.63
5	22.62	28.50	094	1.05
10	22.14	29.10	113	0.73
15	21.68	29.41	155	0.73
20 ,	21.34	29.43	164	0.81
25	21.14	29.47	160	0.73
30	20.96	29.51	115	0.45
35	20.26	29.57	116	0.34
40	20.16	29.58	118	0.36
45	20.06	29.60	107	0.34

704 X 23 July	1 y 52 D	329 EST epth 48'	Win	ther 05 d S-2 33.3°C
Depth (ft)	Temp	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20			107 127 137 137	2.61 2.34 1.90 1.73
25 30 35 40 45			126 126 119 109 110	1.49 1.43 1.17 0.92 0.82

706A 23 July		550 EST epth 35'	Wind	ther 02 1 S-1 34.4°C
Depth (ft)	Temp	Sal (0/00)	Curi Dir (°T)	Speed (kts)
0 5 10 15 20 25 30 33	31.06 30.46 27.50 25.24 20.48 20.42 20.40 20.40	17.82 17.82 19.43 22.28 28.08 28.16 28.17 28.16	150 151 145 159 150 151 151 150	1.51 1.49 1.39 1.32 0.59 0.44 0.44

706A 23 July		650 EST epth 35 [†]	Wind	ther 13 l SE-1 34.4°C
Depth (ft)	Temp (°C)	Sal (0/00)	Curr Dir (°T)	ent Speed (kts)
0			169 164	1.28 1.46
5 10			159	1.69
15			151	1.43
20			151	1.05
25			151	0.70
30			160	0.58
34			161	0.58

709V 23 July		814 EST epth 23'	Wind	ther 13 1 W-4 32.8°C
Depth (ft)	Temp	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 23	28.08 25.94 25.72 25.70 25.68 25.68	23.38 25.45 25.65 25.69 25.71 26.99	198 282 280 289 310 309	0.97 0.29 0.26 0.22 0.18 0.22

709V	1858 EST	Weather 13
23 July 52	Depth 23'	Wind W-3
•		Air 31.1°C

+		i	Ī	•		
				Cur	rent	į
	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	
ı	0					
]	5			259	0.31	
Ì	10			307	0.41	
Ì	15			324	0.41	
	20			324	0.43	
	23			32 0	0.31	
- 1		•	1	_		

723 09 24 July 52 De		955 EST epth 45'	Wine	ther Ol i E-2 27.8°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5		 	 315	0.77
10			328	0.87
15				
20			025	0.90
25				
30			027	0.97
40			026	1.41

 723 25 July		910 EST epth 47'	Win	ther 01 d E-3 27.8°C	ı
Depth (ft)	Temp	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)	
0 5 10 15 20 25 30 35 40	27.54 27.50 27.41 26.90 25.54 24.78 24.19 24.18	16.04 16.04 16.20 16.37 18.53 21.73 23.09 23.73 24.50 24.51	201 327 077 058 030 356 005	0.28 0.00 0.00 0.28 0.44 0.80 0.77 0.97	,

I

724R 25 July	•	16 EST pth 73'	Wind	ther Ol 1 E-4 26.1°C
Depth (ft)	Temp (°C)	Sal (0/00)	Curi Dir (°T)	cent Speed (kts)
0 5 10 15 20 25 25 35 40 50 55 65 70 72	27.94 27.94 27.94 27.94 27.86 23.54 23.70 23.62 23.46 23.38 23.30 23.12 22.98 22.99	17.71 17.71 17.72 17.73 17.97 25.38 25.65 25.68 25.81 25.99 26.00 26.05 26.14 26.32 26.38	196 196 175 178 175 174 179 167 168 159 173 	0.96 0.96 0.87 0.96 0.70 0.50 0.00 0.00 0.28 0.34 0.28 0.28 0.00 0.00

724R	0808 EST	Weather Ol
25 July 52	Depth 74'	Wind E-4 Air 27.2°C

-		. ~	•	Í
]		1	Cur:	rent
Depth (ft)	Temp	Sal (o/oo)	Dir (°T)	Speed (kts)
0			192	0.85
5			191	0.74
10		***	193	0.80
15		#6	193	0.62
20			193	0.87
25 ,			202	0.44
30				0.00
35		,ee es		0.00
40				0.00
45				0.00
50				0.00
		em em		0.00
55 60				0.00
65				0.00
70			047	0.28

744B 1512 EST 25 July 52 Depth 56'		25 July 52 Depth 56' Wind:		ther Ol i NNE-1 30.6°C
Depth	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30 35 40 45 50	29.08 29.04 28.84 28.52 28.58 28.50 28.10 27.36 26.68 26.04 25.96	13.29 13.28 13.37 13.47 13.73 13.85 14.07 14.75 17.60 18.96 19.37 21.04	029 043 049 063 035 020 351 343 346 339	0.15 0.24 0.41 0.31 0.29 0.46 0.61 0.18 0.45 0.57

•	epth 56'	Weather Ol Wind NNE-1 Air 36.7°C
---	----------	--

			Current			
Depth (ft)	Temp	Sal (0/00)	Dir (°T)	Speed (kts)		
0				0.00		
5			~=	0.00		
10				0.00		
15				0.00		
20		~=		0.00		
25			009	0.29		
30			018	0.31		
			338	0.43		
35 40		***	319	0.50		
45			329	0.57		
50			331	0.52		
55			029	0.34		

744V 24 July		220 EST epth 28'	Wind	ther Ol 1 E-1 27.8°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 27			067 067 039 038 037 037 156	0.66 0.66 0.69 0.71 0.85 1.08 0.62

744V 24 July		320 EST epth 28'	Wind	ther 01 1 E-1 27.8°C
Depth (ft)	Temp	Sal (o/oo)	Curr Dir (°T)	rent Speed (kts)
1 0	, ee es			
5			048	0.34
10			041	0.52
15		! !	023	0.62
20			003	0.77
25			003	0.90
27			349	0.95

744V	1229 EST	Weather -
25 July 52	Depth 28'	Wind -
		A4 > -

		1	Cw	rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	28.24	15.25		
5	28.18	15.34		
10	28.16	15.51		
15	28.14	15.58		
20	28.04	15.76		,ess 600
25 28	27.28	18.89		
28	27.00	20.07		

803 F 26 July		610 EST epth -	Weath Wind Air -		812 4 Aug 5		6 EST th -	Weather Wind - Air -	•
		1	Cur	rent				Cur	rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.60	12.08			0	27.62	12.46		en 615
5	27.56	12.09			5	27.61	12.46		
10	27.53	12.09			10	27.48	12.47		
15	27.53	12.11			15	27.28	12.48		
20	27.54	12.12			20	27.18	12.52		
	27.58	12.19			25	26.87	13.12		
25 30	27.42	12.22	i		30	26.53	14.40	so =	
35	26.71	15.20			. 35	25.74	15.63		an (CR
40	25.95	17.59		1	1				

804N 26 July		0718 EST Depth -		her - -
Depth (ft)	Temp (°C)	Sal (0/00)	Cur: Dir (°T)	Speed (kts)
0	27.18	13.00		,
5	27.18	12.99		
10	27.18	12.98		
15	27.18	12.98		
20	26.98	15.28		

813P 4 Aug 5		7 EST th _	Weather Wind - Air -	•
i			Curr	rent
Depth (ft)	Temp	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.60	12.32		
5 ¹	27.58	12.33		
10	27.58	12.33		
15 '	27.56	12.34		
20	27.44	12.38		
25	27.40	13.20		
3 0	26.67	15.09		
3 5 ₁	25.60	18.20		
40	25.62	18.48		
45	25.62	18.48		
**		L	لــــ لـــــــــــــــــــــــــــ	

		0908 EST 52 Depth -		ner - -
			Cur	rent
Depth		Sal	Dir	Speed
(ft)	(°C)	(0/00)	(T°)	(kts)
0	27.68	11.15		
5	27.34	11.22		
10	27.34	11.21	' 	
15	27.25	11.21	,	
20	27.19	11.29		
25	27.03	12.06		
30	26.84	12.75	!	
35	26.61	14.58	[
40	25.27	17.44		₩ ₩
45	25.13	17.88		e= co
50	25.12	17.93		

834G 26 Jul;	834G 1137 EST 26 July 52 Depth -		Weatl Wind Air -	-
Depth (ft)	Temp (°C)	Sal (o/oo)	Curı Dir (°T)	ent Speed (kts)
, 0	27.77	10.20		
5	27.74	10.20		
10	27.01	10.23		
15	27.01	10.22		
20	26.68	10.94		
25	26.91	11.77		CO 400
30	25.86	14.85		***
35	25.26	16.55		***
40	24.96	17.34		
45	24.40	17.39		
50	24.32	17.59		
55	24.27	17.65		*** En
_60	24.25	17.68	- -	

834G 21 July		000 EST epth -	Weat Wind Air	her - -
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30 35 40 45 50 55 60	28.46 27.78 27.28 27.16 26.61 25.63 24.93 24.32 23.86 23.56 23.50 23.40 23.24	10.53 10.60 10.82 10.87 11.14 11.65 13.35 15.50 16.83 17.50 18.00 18.11 18.27 18.47		

834K 26 Jul 	834K 1235 EST 26 July 52 Depth -		Weath Wind Air	- 1
Depth (ft)	Temp	Sal (o/oo)	Curr Dir (°T)	cent Speed (kts)
0 5 10 15 20 25 30	28.24 28.24 28.01 27.95 27.42 25.98 24.36	10.37 10.37 10.37 10.28 10.40 12.50 15.43		

848E 5 Aug 5	848E 1029 5 Aug 52 Dept		Weathe Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Curi Dir (°T)	rent Speed (kts)
(1-7)				
0	27.54	10.77		
5	26.90	11.49		
10	26.82	11.51		
15	26.80	11.51		
20	26.80	11.50		***
25	26.80	11.50		
30	26.78	11.62		
35	26.80	11.78		
40	26.08	13.77		
45	25.80	14.12		
50	25.44	14.73		
55 60	25.20	15.18		
60	25.08	15.88		
65	25.05	16.42		
70	25.58	18.57		
75	25.62	18.79		
80	25.64	18.88		
85	25.66	18.90		
90	25.66	18.93	!	
95	25.66	19.00		
100	25.66	19.00		
105	25.66	18.95		
110	25.65	18.80	:	449

908 16 July		16 EST epth 32'	Wind	her 13 NWE-1 25.8°C	908 16 Jul		921 EST epth 32'	Wind	her 02 ESE-1 26.1°C
			Cur	rent	:	- 1		Cur	rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	27.51	5.05	176	0.87	0	26.87	4.36	208	1.13
5	27.14	5.71	193	0.70	5	26.91	4.46	207	1.02
10	27.37	6.07	192	0.58	10	26.88	4.92	202	0.80
15	26.99	6.48	201	0.65	15	26.98	5.48	196	0.67
20	26.08	7.55	187	0.34	20	26.96	6.18	195	0.41
25	25.18	8.74	182	0.28	25 -	26.06	6.76	193	0.29
30	24.76	9.24		0.00	30	24.96	8.52	187	0.13
908 16 July		S15 EST pth 32'	Wind	her 14 NNE-1 26.1°C	908 16 Jul		008 EST epth 32'	Wind	her 02 ESE-1 26.1°C
			Curr	rent				Cur	rent
Depth	Temp	Sal	Dir	Speed	Depth	Temp	Sal	Dir	Speed
(ft)	(°C)	(0/00)	(°T)	(kts)	(ft)	(°C)	(0/00)	(°T)	(kts)
0	27.34	4.81	201	1.13	0	26.98	4.23	216	0.71
5	27.64	4.88	196	0.95	5	27.00	4.25	212	0.77
10	27.10	5.56	194	0.71	10	27.01	4.35	206	0.77
15	27.16	5.90	192	0.52	15	26.77	5.46	184	0.47
20	27.12	6.61	191	0.36	20	26.78	6.14	172	0.34
25	25.88	7.70	185	0.29	25	26.19	6.58		0.00
30	24.99	8.91	169	0.26	30	24.55	8.90		0.00
, ,,,,	6T.77	U•74	107	V.E.			1 2.70		0.00

908 2112 EST Weather 07 16 July 52 Depth 32' Wind 0 Air 26.7°C

			Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	27.08	3.84	215	0.67
5	27.24	4.02	216	0.61
10	27.44	4.43	205	0.53
15	26.95	5.14	174	0.31
20	26.69	5.72		0.00
25	26.49	6.29	058	0.26
30	24.43	9.12	387	0.31

908 16 July	2312 EST 16 July 52 Depth 32'		Weather 14 Wind SSW-3 Air 25.0°C		
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)	
0 5 10 15 20 25	26.89 27.14 26.83 26.80 26.08 24.90	3.45 4.60 5.64 5.95 7.61 9.00	314 314 342 372 371 001	0.22 0.34 0.34 0.50 0.73 1.02	

908 2213 EST Weather 14 16 July 52 Depth 32' Wind NW-4 Air 25.6°C

			Current		
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	
0 5 10 15 20 25	26.86 26.98 26.91 26.80 26.55 25.01 24.41	3.53 3.99 5.34 5.55 5.95 8.67 9.34	192 247 069 052 000 002	0.43 0.41 0.00 0.18 0.29 0.45 0.50	

908 1 7 Jul y 52	0003 EST Depth 30'	Weather 14 Wind SW-3 Air 26.7°C
		•

		ı 1	Current		
Depth (ft)	Temp	Sal	Dir	Speed	
	(°C)	(o/oo)	(°T)	(kts)	
0	26.74	3.63	018	0.41	
5	27.14	4.78	018	0.58	
10	27.10	6.17	017	0.65	
15	26.40	6.82	017	0.87	
20	26.20	7.66	017	1.09	
25	25.24	8.74	019	1.13	
30	24.84	9.05	020	0.70	

908 17 July		lOl EST epth 30'	Wind	her 03 WSW-3 25.6°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur. Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	26.97 27.36 27.22 26.82 26.68 25.90 25.10	4.66 5.53 7.01 7.00 7.39 8.18 8.81	004 004 004 004 006 006 007	0.82 0.87 1.09 1.09 0.96 1.09 0.87

908 17 July	08 0301 EST 7 July 52 Depth 30'		Weather 03 Wind W-2 Air 25.6°C		
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir · (°T)	rent Speed (kts)	
0 5 10 15 20 25 30	27.32 27.42 27.52 26.32 26.36 25.96 25.44	5.89 6.01 6.66 7.51 7.71 8.26 8.61	025 025 026 027 027 027 028	0.50 0.50 0.70 0.65 0.77 0.65 0.41	

908 17 July	908 0200 EST 17 July 52 Depth 30'			
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	27.45 27.58 27.56 27.28 25.98 25.90 25.24	6.12 6.36 6.93 7.00 7.98 8.27 8.66	032 033 034 032 033 033 032	0.77 0.92 1.05 0.87 0.96 0.87 0.65

908 17 July	O402 EST July 52 Depth 32'		Wind	her 03 SW-2 25.0°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	27.10 27.18 27.26 26.44 26.36 25.93 25.80	5.52 5.62 6.66 7.44 7.70 8.32 8.39	028 017 357 359 359 009 359	0.38 0.41 0.38 0.57 0.58 0.38

908 17 July	08 0500 EST 7 July 52 Depth 32'		Weather 03 Wind N-2 Air 25.0°C		
			Cur	rent	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T) ¦	Speed (kts)	
0	26.94	5.39	172	0.29	
5	26.97	5.75	172	0.26	
10	26.84	6.97	354	0.38	
15	26.88	7.33	353	0.38	
20	26.66	7.49	354	0.41	
25	26.06	8.37	355 '	0.31	
30	25.86	8.54	356	0.18	

		•		her 05 NE-1 26.1°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	26.68 26.85 26.86 26.85 26.50 25.65 25.73	5.04 6.27 7.47 7.61 7.80 8.37 8.30	176 179 225 223 203 179 167	0.92 0.70 0.43 0.50 0.55 0.45

7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	08 0600 EST 7 July 52 Depth 32'		Weather O Wind NNW- Air 25.0°	
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0	26.75	5.32	177	0.43
5	26.93	6.66	164	0.29
10	27.02	7.19	203	0.41
15	26.76	7.54	212	0.45
20	26.20	8.00	247	0.22
25	25.85	8.32		0.00
3 0	25.82	8.35	251	0.26

		BOO EST epth 32'	Wind	her 05 0 27.8°C
Depth (ft)	Temp	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	26.86 26.82 26.94 26.91 26.88 26.44 25.68	5.00 5.90 7.20 7.28 7.35 7.82 8.32	187 183 187 198 192 182 159	1.02 0.90 0.52 0.56 0.52 0.56

908 17 July	· 52	0900 EST Depth 32'	Weather 05 Wind S-1 Air 30.6°C	908 17 July		oo EST	Wind	ner 05 S-1 29.4°C
Depth (ft)	Temp	Sal (o/oo)	Current Dir Speed (°T) (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	27.34 26.96 26.93 27.03 26.96 26.43 25.74	5.34 5.90 7.06 7.24 7.80	208 1.02 207 0.95 197 0.90 172 0.52 172 0.39 168 0.56 144 0.56	0 5 10 15 20 25 30	27.97 27.02 26.97 26.63 25.80 25.51 25.38	3.85 5.38 5.66 6.50 7.92 8.31 8.42	238 230 209 168 124 	0.80 0.34 0.47 0.56 0.39 0.00
908 17 July	y 52	1000 EST Depth 32'	Weather 05 Wind S-1 Air 29.4°C	908 17 July		200 EST epth 32'	Wind	her 05 . WNW-1 30.0°C

1			Curi	rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0 5 10 15 20 25 30	27.50 27.08 27.04 26.87 26.70 25.02 25.64	4.23 5.52 5.92 6.76 7.61 8.17 8.30	209 209 204 181 182 147 141	1.08 0.69 0.74 0.66 0.39 0.44

	Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)	
	0 5 10 15 20 25 30	28.32 27.21 26.94 26.72 26.11 25.53 25.39	4.27 4.99 5.47 6.03 7.08 8.15 8.33	219 219 210 322 077 066	0.35 0.09 0.00 0.12 0.19 0.16 0.15	

the statement of the st	908 17 Jul y		600 EST epth 32'	Wind	ner 05 W-1 52.5°C
	Depth (ft)	Temp (°C)	Sal (o/oo)	Curr Dir (°T)	cent Speed (kts)
	0 5 10 15 20 25 30	28.12 27.34 26.99 26.49 25.98 26.06 25.84	4.60 4.98 5.60 6.51 7.50 7.77 8.16	222 043 053 033 003 004	0.12 0.00 0.12 0.14 0.26 0.34 0.34

908 17 July		500 EST epth 32'	Wind	her 05 S-1 37.8°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	28.55 27.30 26.40 26.68 26.14 25.37 25.11	4.78 5.10 6.81 7.57 7.84 8.65 8.98	035 065 045 024 020 024	0.34 0.34 0.00 0.34 0.50 0.66 0.45

908 17 July		epth 32'	Wind	ner 05 S-1 36.1°C
Depth (ft)	Temp	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30	27.88 27.14 26.28 26.58 26.06 25.56 25.26	4.80 5.05 6.71 7.65 7.96 8.55 8.68	 052 022 017 017 018	0.00 0.00 0.19 0.30 0.44 0.70 0.66

908 17 July		600 EST epth 32'	Wind	ner 05 0 58.1°C
•				rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	28.47	4.96		0.00
5	27.46	5.08		0.00
10	26.84	6.02		0.00
15	26.11	7.22	042	0.19
20	25.84	8.34	028	0.33
25	25.64	8.61	033	0.27
30	25.12	8.93	Ofty	0.16

918U 16 July		45 EST pth -	Weat Wind Air	
			Cur:	rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	27.95	0.87		
5	27.20	0.90		
10	27.14	0.96	49 49	
15	27.08	1.20		
20	27.06	1.23		

	_		Cur	rent
.a.a.	_			* CTT C
th)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
	28.12	0.26	065	0.15
	28.00	0.26	055	0.12
	27.62	0.28	274	0.11
	27.46	0.29		0.00
	27.24	0.28		0.00
		27.46	27.46 0.29	27.46 0.29

924QQ 1408 EST 15 July 52 Depth 20'		Wind	her 05 SSW-3 32.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
				(200)
0	28.04	0.25	049	0.57
5	28.02	0.25	038	0.31
10	27.66	0.28	056	0.14
15	27.24	0.31	048	0.15
18	27.02	0.28		
20			048	0.11

924QQ 15 J¥ly	1300 EST y 52 Depth 20'		Wind	her 05 WSW-3 32.2°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18 20	28.12 28.08 27.70 27.32 27.12	0.28 0.28 0.29 0.29 0.28	059 063 061 063 062	0.29 0.29 0.19 0.14 0.14

924QQ 15 July	924QQ 1502 EST 15 July 52 Depth 20'		Wind	her 05 ESE-3 31.1°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18 19	27.92 27.88 27.70 27.18 27.04	0.23 0.23 0.25 0.27 0.28	039 046 042 046 	0.46 0.31 0.22 0.12

924 99 15 Jul y		ool EST epth 20'	Wind	her 05 S-3 31.1°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speedi (kts)
0 5 10 15 18 20	27.96 27.88 27.70 27.60 27.33	0.36 0.36 0.37 0.37	047 045 225 227	0.17 0.11 0.00 0.11 0.11

924QQ 15 July		803 EST epth 20'	Wind	her 05 SW-3 30.0°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18 20	28.33 28.33 28.33 28.28 28.25	0.25 0.25 0.25 0.26	237 238 239 237 236	0.24 0.27 0.26 0.30 0.26

92 4QQ 15 Jul y		700 EST epth 20'	Wind	her 05 S-3 31.1°C
Depth (ft)	Temp	Sal (0/00)	Cur. Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.84 27.84 27.82 27.76 27.48	0.25 0.24 0.24 0.25 0.27	222 234 225 227 225	0.19 0.23 0.21 0.24 0.27

924QQ 15 July		900 EST epth 20'	Wind	her 05 WSW-1 29.4°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	28.25 28.25 28.24 28.24 28.23	0.29 0.29 0.29 0.28 0.28	268 243 238 223 223	0.85 0.95 0.87 0.82 0.77

924QQ 2000 EST 15 July 52 Depth 20'			Wind	ner 03 S-2 28.9°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Curr Dir (°T)	rent Speed (kts)
0 5 10 15	27.94 27.94 27.94 27.94 27.95	0.28 0.28 0.28 0.28 0.28	274 254 223 218 222	0.97 0.87 0.74 0.71 0.62

924QQ 2200 EST 15 July 52 Depth 20'			Wind	her 01 S-2 27.8°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	28.09 28.11 28.11 28.11 28.11	0.30 0.31 0.32 0.33 0.33	267 222 103 103	0.00 0.11 0.19 0.20 0.17

		:	Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0 5	27.89 27.89	0.27 0.26	287 264	0.66
10 ' 15	27.90 27.90	0.27 0.27	224 215	0.62
ī́8	27.90	0.27	209	0.56

924QQ 2300 EST 15 July 52 Depth 20'		Wind	ther 01 1 S-3 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	28.11 28.13 28.13 28.13 28.13	0.33 0.33 0.33 0.33 0.34	032 042 042 042 052	0.14 0.14 0.11 0.11 0.15

924 QQ 16 Jul y		000 EST epth 20'	Wind	her 01 SW-3 27.8°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.68 27.98 27.98 27.97 27.97	0.31 0.31 0.31 0.35 0.35	038 042 037 030 032	0.52 0.47 0.56 0.56 0.59

924QQ 0200 EST 16 July 52 Depth 20'		Wind	ner 01 S-2 26.6°C	
Depth (ft)	Temp	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
c ; 10 15 18	27.72 27.72 27.70 27.70 27.71	0.31 0.31 0.31 0.31 0.31	039 039 041 041 040	0.74 0.69 0.74 0.74 0.69

924 99 16 July	24QQ 0100 EST .6 July 52 Depth 20'		Wind	ner 01 SW-3 27.2°C
	_			rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0 5	27.82 27.82	0.37 0.37	046 047	0.71 0.69
10 15	27.83 27.83	0.37	042 042	0.71
18	27.83	0.37	043	0.66
1	J	1 1		

16 July 52 Depth 20'			Wind	S-2 26.1°C
			Cur	rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speeà (kts)
0	27.48	0.28	034	0.56
5	27.48	0.28	033	0.56
10	27.48	0.28	035	0.47
15	27.48	0.28	038	0.47
18			040	0.44
19	27.48	0.28		

924QQ 16 Jul	0 y 52 D	400 EST epth 18'	Wind	her 01 S-2 25.6°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.38 27.40 27.39 27.40 27.39	0.25 0.25 0.25 0.25 0.25	039 037 033 034 036	0.38 0.29 0.36 0.38 0.36

				her 01 SSW-1 27.8°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.35 27.36 27.36 27.36 27.36	0.26 0.26 0.26 0.26 0.26	252 247 242 242 251	0.45 0.41 0.41 0.38 0.29

				her 01 SSW-1 26.1°C
Depth (ft)	Temp	Sal (o/oo)	Cur: Dir (°T)	rent Speed (kts)
0 5 10 15 18 19	27.32 27.32 27.33 27.33 27.34	0.25 0.25 0.25 0.25 0.25		0.00 0.00 0.00 0.00 0.00

924QQ 16 July	924QQ 0704 EST 16 July 52 Depth 20'		Wind	her 01 SSW-1 26.7°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur. Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.36 27.36 27.34 27.32 27.32	0.27 0.27 0.27 0.27 0.27	270 260 258 260 261	0.87 0.87 0.70 0.65 0.58

16 July 92400		08 EST pth 20'	Wind	her 01 WSW-2 28.3°C
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.59 27.52 27.40 27.36 27.34	0.28 0.28 0.28 0.28 0.28	260 260 249 260 260	1.13 0.96 0.87 0.77 0.82

924QQ 16 July		oo5 EST epth 20'	Wind	her 01 WSW-1 31.1°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	28.26 28.15 27.90 27.81 27.80	0.30 0.30 0.33 0.34 0.34	257 259 258 258 258	0.92 0.92 0.87 0.77 0.58

924QQ 16 July		ooo EST pth 20'	Wind	her 01 SW-1 28.9°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	27.83 27.67 27.62 27.59 27.58	0.32 0.32 0.32 0.32 0.32	264 260 260 260 260	1.09 0.92 0.87 0.70 0.70

924QQ 16 Jul		OO EST epth 20'	Wind	her Ol WSW-3 30.8°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 18	28.66 28.24 28.18 28.16 28.16	0.25 0.28 0.28 0.29 0.29	284 224 222 217 216	0.77 0.70 0.77 0.58 0.58

J-17 22 July		332 EST epth 31'	Wind	her 01 W-1 35.0°C
Depth (ft)	Temp (°C)	Sal (0/00)	Cur.	rent Speed (kts)
0 5 10 15 20 25 27	30.04 28.58 28.26 28.00 27.88 27.74 27.74	14.66 16.28 17.15 17.72 17.95 18.23 18.23	128 115 116 120 148	0.52 0.56 0.52 0.44 0.34

J-24 0740 EST 22 July 52 Depth 81'		Wind	her 01 NW-1 30.6°C	
				rent
Depth (ft)	Temp	Sal (o/oo)	Dir (°T)	Speed (kts)
ō	31.04	4.98	706	0.00
5 10	31.02	5.01	326	0.34
	31.02	5.32	324	0.34
15	31.02	6.67		0.00
20	30.97	7.00		0.00
25	30.96	7.12		0.00
30	30.90	7.61	054	0.39
35	30.88	7.90	053	0.44
40	30.84	8.17	052	0.34
45	30.81	8.39	052	0.28
50	30.80	8.44	050	0.31
55 60	30.80	8.46	050	0.34
60	30.79	8.55	050	0.31
65	30.74	8.89	050	0.34
70	30.72	8.93	049	0.34
75	30.72	8.91	048	0.34
80	30.68	9.24	047	0.28
81	30.68	9.27		ex
83			047	0.28

J-34 22 <i>J</i> uly		920 EST epth -	Weat Wind Air	
Depth (ft)	Temp (°C)	Sal (0/00)	Cur: Dir (°T)	rent Speed (kts)
0	30.39	0.83		

J-43 22 July 52	1035 EST Depth 27'	Weather Ol Wind O Air 37.2°C
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			Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	30.02	0.14	286	0.66
5	29.82	0.15	292	0.62
10	29.80	0.15	298	0.69
15	29.78	0.16	298	0.71
20	29.77	0.16	298	0.74
25	29.76	0.17	298	0.69
27			296	0.56
30	29.76	0.17		

850D 17 July		000 EST	Wind	her Ol SW-1 30.0°C
Depth (ft)	Temp	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 35 45 45 50 50 50 50 50 50 50 50 50 50 50 50 50	28.64 27.52 26.80 25.64 25.62 25.32 25.32 25.32 22.33 23.33	9.26 9.30 9.68 9.68 9.91 10.57 10.57 10.57 11.78 12.76 12.76 17.66 17.66 17.78 17.78 17.78 17.91 17.93 17.93 18.07 18.07	181 180 180 175 174 170 170 170 170 137 019 009 004 009 343 354 358	0.46 0.69 0.58 0.45 0.45 0.34 0.22 0.26 0.26 0.29 0.26 0.29 0.26 0.34
168	en en		340	0.36

850D 17 July		200 EST epth 168'	Wind	ther 01 1 SW-1 29.4°C
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	rent Speed (kts)
0 10 15 25 25 25 45 55 65 77 80 120 140 160 165	27.46 26.63 26.14 25.64 25.64 25.48 25.69 23.69 23.69 22.39 22.29 22.29 22.32	9.22 9.32 9.42 9.53 9.62 9.85 10.40 11.79 12.52 12.70 14.45 15.33 17.32 17.50 17.63 17.80 18.07	187 186 179 179 176 126 115 036 337 340 350 356 355 354 354 354 355 356	0.26 0.36 0.43 0.36 0.26 0.28 0.00 0.00 0.18 0.45 0.45 0.45 0.34 0.34 0.34

850D 2300 EST 17 July 52 Depth 168'			Weather Ol Wind SW-1 Air 30.0°C		850D 18 July	Weather - Wind - Air -			
			Current					Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp	Sal (o/oo)	Dir (°T)	Speed (kts)
0			017	0.34	0	27.66	9.31		
5			009	0.36	5	27.26	9.45		
10			008	0.34	10	26.02	9.69		
15			357	0.38	15	25.94	9.90		
20			359	0.46	20	25.84	9.99		
25			000	0.46	25	25.59	10.12		
30			019	0.57	30	25.06	10.56		
35			017	0.66	35 40	24.97	10.74		
35 40			009	0.73	40	23.66	12.78		
45			350	0.89	45	23.06	13.72		~ ~
50			358	1.01	50	22.90	14.14		
55			004	1.03	55 60	22.76	14.52		
60			000	0.99	60	22.57	15.07		on ##
80			335	0.85	80	55.44	15.93		
100			325	0.89	100	22.35	17.43		
120			328	0.73	120	22.35	17.76		
140			323	0.81				į	

18 July 52 Depth 168' W		Wind	her 02 WSW-2 28.3°C	850D 0200 EST 18 July 52 Depth 168'			Weather - Wind - Air -		
			Current					Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	, a co		345	1.53	0	27.15	9.60		=> 00
5			345	1.39	5	27.06	9.72	**	
10			345	1.39	10	27.52	9.67		
15	,m tn	en en	344	1.39	15	27.49	9.67		
20			348	1.32	20	27.49	9.67		
25			348	1.25	25	26.56	10.17		
30			348	1.32	30	24.63	11.30	60 6 3	
35			349	1.17	35 40	24.06	12.09	** #3	
30 35 40			355	1.09	40	23.77	12.71		
45			355	1.17	45	23.60	13.00		
50			350	1.28	50	23.20	13.88		
55		-0	350	1.28	55	23.10	14.12		
55 60			356	1.36	60	23.02	14.38		
80			352	1.32	80	22.63	15.60		
100 .			352	1.66	100	22.52	16.77		
120			354	1.63	120	22.52	16.98		
140			354	1.59			-		
153			354	1.56			· '		

850D 0300 EST Weather 02 18 July 52 Depth 163' Wind 0 Air 27.8°C				0	850D 0400 EST Weather 18 July 52 Depth 168' Wind - Air -					
		į	Current					Current		
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp	Sal (o/oo)	Dir (°T)	Speed (kts)	
0	==		358	0.96	0	27.38	9.80		44 (44)	
5			358	0.87	5	26.96	9.84			
10			358	0.87	10	26.94	9.84			
15			352	0.87	15	26.92	9.84			
20			352	0.96	20	26.90	9.84			
25			353	0.87	25	25.70	10.42			
30			353	0.92	30	25.31	10.70			
35			358	0.92	¹ 35 40	24.54	11.13			
40			358	0.96		23.74	12.54			
35 40 45		}	358	1.05	45	23.36	13.26			
50			358	1.05	50	23.26	13.42			
50 55 60			358	1.09	55	23.18	13.59			
60 -			359	1.09	60	23.13	13.80			
80			353	1.13	80	22.76	15.08			
100		}	353 348	1.25	100	22.56	16.32			
120			348	1.36	120	22.54	16.88			
140			348	1.05	140	22.51	17.36		40 00	
160			357	1.09	160	22.51	17.75			

850D 0500 EST 18 July 52 Depth 168'		Weather Ol Wind O Air 27.8°C		850D 18 July 52		600 EST epth 169'	Weather Ol Wind S-1 Air 31.1°C		
			Current			! 		Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0				0.00	0	27.76	9.67	149	0.29
545				0.00	5	27.74	9.67	148	0.26
16				0.00	10	27.56	9.68	162	0.38
15				0.00	15	26.84	9.83	177	0.41
20			~-	0.00	20	26.46	10.02	171	0.43
25				0.00	25	26.06	10.18	161	0.41
30				0.00	30	25.54	10.33	140	0.36
35				0.00	35	25.20	10.47	160	0.35
35 40				0.00	40	24.43	11.37	174	0.41
45		· [0.00	45	24.40	11.46	157	0.43
50				0.00	50	24.08	12.04	162	0.43
55				0.00		23.74	12.66	147	0.18
55 60			329	0.28	55	23.00	13.09	148	0.18
80			329	0.44	80	22.58	16.83		0.00
100			331	0.39	100	22.56	17.11	eo en	0.00
120				0.00	120	22.56	17.32	ens esp	0.00
140				0.00	140	22.54	17.42		0.00
160			192	0.34	1 60	22.54	17.51		0.00
165			191	0.39	165	22.54	17.47	er cs	es ca
/					169	22.52	17.47		

850D 18 July	18 July 52 Depth 168' Wind SW						0800 EST Weather - ly 52 Depth 168' Wind - Air -			
			Curr	ent				Cur	rent	
Depth (ft)	Temp	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	
0			172	0.87	0	27.44	9.54			
5		***	177	0.80	5	27.44	9.57			
1ó			177	0.74	10	27.35	9.66			
15			173	0.74	15	27.32	9.73			
20			175	0.87	20	26.91	9.86			
25			170	0.59	25	26.80	9.92			
30			169	0.59	30	26.00	10.27			
39			174	0.59	35 40	25.25	10.77			
30 39 40	;		174	0.59	40	25.15	10.87			
45			174	0.56	45	23.72	12.45			
50			173	0.59	50	23.04	13.58			
50 55 60			172	0.44	55	22.56	15.33			
60			178	0.39	60	22.52	15.85			
80			174	0.34	80	22.36	17.14			
100			176	0.44	100	22.35	17.27			
120	;		172	0.59	150	22.34	17.35			
140			172	0.59	140	22.32	17.50			
160			173	0.62	160	22.31	17.63			

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850D 0900 EST 18 July 52 Depth 168'				SW-1	850D 1000 EST 18 July 52 Depth 168'			Weather - Wind - Air -	
ļ			Cur	rent				Cur	rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	***		175	0.80	0	27.75	9.52		
5 10			175	0.74	5	27.18	9.76		
			174	0.77	10	27.04	9.90		
15			174	0.77	15	26.86	9.97	en eu	
20			174	0.66	20	26.24	10.05		
25			169	0.74	25	25.96	10.15		
30 i			164	0.69	30	25.44	10.43		
35 40			164	0.69	35	24.94	10.84		
40			164	0.74	40	24.48	11.54		
45			164	0.52	45	23.10	13.73		E
50			174	0.62	50	22.94	14.32		
55 60			174	0.59	55	22.52	16.23		
60			174	0.56 '	60	22.48	16.54		
80			166	0.71	80	22.42	17.17		
100			166	0.87	100	22.40	17.52	:	
120			156	0.97	120	22.40	17.65		
145			156	0.97	140	22.39	17.80		
165			156	1.08	160	22.39	17.78		

	850 D 18 July		1100 EST Depth 168'	Wind	her 05 0 33.9°C	850D 18 July		200 EST epth 168'	Weath Wind Air -	
			1	Cur	rent				Cur	rent
	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
	0			194	0.29	0	29.07	9.49		
	5			199	0.45	5	28.10	9.55		
:	10			198	0.38	10	26.94	9.89		
.	15			188	0.29	1.5	26.56	10.00		
!	20			179	0.29	20	26.16	10.02		
•	25			169	0.29	25~	26.15	10.16		
	30			158	0.29	30	25.50	10.42		
;	35			160	0.29	35	24.95	10.76		
-	40			161	0.38	40	24.50	11.65		e =
	45			166	0.50	45	23.63	13.04		
•	50			170	0.53	50	22.65	15.90		e m
,	55			180	0.18	55	22.52	16.73		
:	60			180	0.29	60	22.50	17.07		
•	80			171	0.53	80	22.47	17.32		
	100			181	0.41	100	22.46	17.49		
•	120			180	0.61 '	120	22.44	17.71		~ ~
_	140			170	0.58	140	22.44	17.69	€0 €	
	165			172	0.58	160	22.44	17.69		

850 D 18 July		300 EST epth 165'	Wind	ner 05 SSE-1 54.4°C	850D 18 July		oo EST	Weather Wind -	
			Cur	rent				Curi	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0				0.00	0	29.90	9.51		
5				0.00	5	27.33	9.83		
10			028	0.18	10	26.80	9.90		
15			027	0.18	15	26.24	10.00		
20				0.00	20 '	25.95	10.34		~=
25			359	0.22	25	25.40	10.67		
30			349	0.34	30	25.21	10.72		
35				0.00	35 40	24.63	11.37		
35 40			348	0.22	40	24.25	11.87	;	
45				0.00	45	23.74	12.88		~-
50			350	0.31	50	22.82	15.28		
50 55 60				0.00	55 60	22.61	16.10		
60				0.00	60	22.52	16.62		
80				0.00	80	22.44	17.52		
100			150	0.18	100	22.43	17.75		~=
120			132	0.22	120	22.43	17.75		
140		:		0.00	140	22.43	17.75		
165				0.00	160	22.43	17.75		

850 p 18 July	, 52 I	L500 EST Depth 162'	Weather 02 Wind S-1 Air 33.3°C		
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)	
1 0					
5			356	0.34	
10			356	0.29	
15			015	0.38	
20			015	0.38	
. 25			345	0.52	
30			345	0.50	
35 40			341	0.50	
40			346	0.48	
45			346	0.45	
50		,5	349	0.41	
55 60			350	0.31	
60			350	0.26	
80			345	0.29	
100			345	0.31	
120			345	0.36	
140			345	0.38	
160		/	346	0.34	

850D 18 July	52 D	Weather 02 Wind 8W-1 Air 33.9°C		
	ļ			rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	27.97	9.74	~~	0.00
5	27.04	9.93		0.00
10	26.62	10.12		0.00
15	26.46	10.14		0.00
20	26.24	10.19		0.00
25	25.60	10.47		0.00
30	25.48	10.55		0.00
35	25.26	10.73		0.00
40	24.30	11.83	075	0.18
45	22.90	14.28	074	0.22
50	22.62	16.11	079	0.22
55	22.50	16.45		0.00
60	22.48	16.55		0.00
80	22.39	17.53		0.00
100	22.38	17.74		0.00
120	22.38	17.87		0.00
140	22.38	18.02		0.00
160	22.38	18.00		0.00

		1800 EST 52 Depth 168'		her - -
;			Cur	rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.94	9.88		
5	27.94	9.87		
10	27.00	9.88		
15	26.77	10.02		
20	26.64	10.09		
25	26.62	10.12		
30	25.36	10.77		
35	24.32	11.90		
40	23.60	13.22		
45	23.37	13.76		
50	22.92	14.94		
55	22.70	15.86		
60	22.63	16.55		
80	22.54	17.35		
100	22.54	17.65		
120	22.54	17.77		
140	22.54	17.90		
160	22.54	17.95		

858D 17 Jul:		813 EST epth -	Weath Wind Air -	3
ı			Cur	rent
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0	28.72	7.15		
5	26,96	7.61		
10	26.14	8.03		
15	26.06	8.28		
20	26.06	8.32		
25	26.22	8.56		
30	25.06	10.03		
35	24.68	10.62		
40	24.50	10.97		
11 7t	23.84	12.15		

M-4 1305 EST 5 Aug 52 Depth 47'		Weather Wind St Air 34	WW-l	M-4 5 Aug 52	M-4 1505 EST 5 Aug 52 Depth 47'		Weather 13 Wind SSE-2 Air 31.7°C		
Depth; (ft)	Temp	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (*T)	rent Speed (kts)
0 5	28.18 27.94	11.05	204 195	0.57	0 5	28.44 27.86	11.10 10.95	167 167	0.15
10	27.92	11.09	165	0.57	10	27.65	11.22	170	0.12
15	27.75	11.20	195	0.52	15	27.57	11.35		0.00
20	26.76	11.75	185	0.34	20	26.56	12.19	167	0.12
25	25.92	12.86	185	0.38	25	26.16	12.50	273	0.14
30	25.48	13.57	195	0.22	30	25.56	13.23	334	0.21
35 40	25.16	13.55		0.00	35 40	25.48	13.30 13.44	335 346	0.20 0.14
45	25.14 25.12	13.61 13.70		0.00	40	25.36 25.22	13.53	166	0.14
- L) RST		n 13	Male	160	O RST	Veathe	 r 13
M-4 5 Aug 5	1400	DEST	Weather Wind W Air 36	-1	M-4 5 Aug 52		O EST th 45'	Weathe Wind S Air 26	E-4
M-4	1400		Wind WAIR 36	-1 .1°C				Wind S Air 26	E-4
M-4	1400		Wind WAIR 36	-1				Wind S Air 26	E-4 .7°C
M-4 5 Aug 5 Depth (ft)	1400 2 Dept Temp (°C) 28.35	Sal (o/oo)	Wind WAir 36 Cur Dir (°T) 205	-1 .1°C rent Speed (kts) 0.36	Depth (ft)	Temp (°C) 28.44	Sal (o/oo)	Wind S Air 26 Cur Dir (°T)	rent Speed (kts)
M-4 5 Aug 5 Depth (ft)	1400 2 Dept Temp (°C) 28.35 27.88	Sal (o/oo) 11.16 11.17	Wind WAir 36 Cur Dir (°T) 205 200	-1 .1°C rent Speed (kts) 0.36 0.38	Depth (ft)	Temp (°C) 28.44 28.50	Sal (0/00) 11.08 11.10	Wind Stair 26 Curt Dir (°T)	rent Speed (kts
M-4 5 Aug 5 Depth (ft)	1400 2 Dept Temp (°C) 28.35 27.88 27.78	Sal (o/oo) 11.16 11.17 11.18	Wind W Air 36 Cur (°T) 205 200 197	-1 .1°C rent Speed (kts) 0.36 0.38 0.58	Depth (ft) 0 5	Temp (°C) 28.44 28.50 28.18	Sal (0/00) 11.08 11.10 11.10	Cur Dir (°T)	E-4 .7°C rent Spec (kts 0.27 0.20 0.21
M-4 5 Aug 5 Depth (ft) 0 5	1400 2 Dept Temp (°C) 28.35 27.88 27.78 27.68	Sal (0/00) 11.16 11.17 11.18 11.29	Cur. Dir (°T) 205 200 197 193	-1 .1°C rent Speed (kts) 0.36 0.38 0.58 0.45	Depth (ft) 0 5 10 15	Temp (°C) 28.44 28.50 28.18 27.76	Sal (0/00) 11.08 11.10 11.10 11.24	Cur Dir (°T)	E-4 .7°C rent Speed (kts 0.27 0.20 0.21 0.00
M-4 5 Aug 5 Depth (ft) 0 5 10 15 20 25	1400 2 Dept Temp (°C) 28.35 27.88 27.78	Sal (o/oo) 11.16 11.17 11.18	Wind W Air 36 Cur (°T) 205 200 197	-1 .1°C rent Speed (kts) 0.36 0.38 0.58	Depth (ft) 0 5	Temp (°C) 28.44 28.50 28.18 27.76 27.26 26.32	Sal (0/00) 11.08 11.10 11.10	Cur Dir (°T)	E-4 .7°C rent Speed (kts 0.27 0.20 0.21 0.00 0.00
M-4 5 Aug 5 Depth (ft) 0 5 10 15 20 25 30	1400 2 Dept Temp (°C) 28.35 27.88 27.78 27.68 26.50 26.12 25.30	Sal (o/oo) 11.16 11.17 11.18 11.29 12.35 12.67 13.47	Cur Oir (°T) 205 200 197 193 198 119 013	-1 .1°C rent Speed (kts) 0.36 0.38 0.58 0.45 0.34 0.15	Depth (ft) 0 5 10 15 20 25 30	Temp (°C) 28.44 28.50 28.18 27.76 27.26 26.32 26.04	Sal (0/00) 11.08 11.10 11.24 11.52 12.43 12.77	Cur. Dir (°T)	E-4 .7°C rent Spee (kts 0.27 0.20 0.21 0.00 0.00 0.00
M-4 5 Aug 5 Depth (ft) 0 5 10 15 20 25 30 35	1400 2 Dept Temp (°C) 28.35 27.88 27.78 27.68 26.50 26.12 25.30 25.26	Sal (0/00) 11.16 11.17 11.18 11.29 12.35 12.67 13.47 13.55	Cur Oir (°T) 205 200 197 193 198 119 013 316	-1 .1°C rent Speed (kts) 0.36 0.38 0.58 0.45 0.34 0.15 0.11	Depth (ft) 0 5 10 15 20 25 30 35	Temp (°C) 28.44 28.50 28.18 27.76 27.26 26.32 26.04 25.70	Sal (0/00) 11.08 11.10 11.24 11.52 12.43 12.77 13.05	Cur. Dir (°T) 330 342	E-4 .7°C rent Spee (kts 0.27 0.20 0.21 0.00 0.00 0.00
M-4 5 Aug 5 Depth (ft) 0 5 10 15 20 25 30	1400 2 Dept Temp (°C) 28.35 27.88 27.78 27.68 26.50 26.12 25.30	Sal (o/oo) 11.16 11.17 11.18 11.29 12.35 12.67 13.47	Cur Oir (°T) 205 200 197 193 198 119 013	-1 .1°C rent Speed (kts) 0.36 0.38 0.58 0.45 0.34 0.15	Depth (ft) 0 5 10 15 20 25 30	Temp (°C) 28.44 28.50 28.18 27.76 27.26 26.32 26.04	Sal (0/00) 11.08 11.10 11.24 11.52 12.43 12.77	## Wind Star 26 Cur. Dir (°T) 330 342	E-4 .7°C rent Spee (kts 0.27 0.20 0.21 0.00 0.00 0.00

M-4 5 Aug 5			Weather 14 Wind SE-7 Air 26.1°C		
Depth (ft)	Temp (°C)	Sal (o/oo)	Cum Dir (°T)	rent Speed (kts)	
0 5 10 15 20 25 30 35 40 45	28.42 28.50 27.96 27.46 27.20 26.54 26.02 25.64 25.26	11.09 11.13 11.40 11.65 12.17 12.68 13.04 13.45 13.49	002 092 174 184 184 	0.12 0.19 0.23 0.19 0.14 0.00 0.00 0.00	

M-4 5 Aug 5			Weather 03 Wind S-3 Air -		
			Current		
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	
0	28.04	11.12	000	0.34	
5	28.06	11.11	330	0.36	
10	28.00	11.10	329	0.53	
15	27.86	11.12	319	0.53	
20	27.64	11.22	318	0.43	
25	27.22	11.47	329	0.35	
30	26.88	11.85	328	0.33	
35	26.22	12.42	336	0.27	
40	26.02	12.65	002	0.25	
44	25.71	12.93	003	0.23	

M-4 5 Aug 5	-4 1806 EST Aug 52 Depth 44'		Weather 03 Wind SE-3 Air 26.7°C		
			Cur	rent	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	
0	28.14	11.11	357	0.16	
5	28.20	11.10	355	0.19	
10	28.14	11.11	010	0.14	
15	27.92	11.21		0.00	
20	27.36	11.65	328	0.11	
25	26.45	12.15	323	0.09	
30	25.84	12.97	337	0.12	
35	25.70	12.95	343	0.09	
40	25.36	13.34		0.00	
43				0.00	
45	25.38	13.32		-	

M-4 2000 EST 5 Aug 52 Depth 43'			Weather 03 Wind S-2 Air 26.7°C		
Depth (ft)	Temp (°C)	Sal (0/00)	Curr Dir (°T)	ent Speed (kts)	
0 5 10 15 20 25 30 35 40 43	28.24 27.96 28.06 27.98 27.96 27.94 27.64 27.00 26.26 25.86	11.05 11.13 11.11 11.13 11.13 11.15 11.27 11.75 12.46 12.80	357 337 337 337 337 337 337 337	0.31 0.38 0.38 0.38 0.41 0.34 0.31	

M-4 5 Aug 5		EST th 43'	Weather Wind St Air 26	3E-2	M-4 5 Aug 5	_	EST th 44'	Weather Wind SE Air 26	:- 2
Depth (ft)	Temp (°C)	Sal (o/oo)	Curr Dir (°T)	Speed (kts)	Depth (ft)	Temp	Sal (o/oo)	Curi Dir (°T)	Speed (kts)
0 5 10 15 20 25 30 35 40 45	28.16 28.16 28.11 28.06 27.86 27.92 26.14 26.52 25.84 25.80	11.01 11.08 11.10 11.11 11.20 11.18 12.58 12.19 12.85 12.90	351 351 002 002 185 185 185	0.27 0.20 0.16 0.14 0.00 0.00 0.22 0.22	0 5 10 15 20 25 30 35 40 44	27.92 27.92 27.88 27.80 26.98 26.44 26.05 25.80 25.62 25.48	11.12 11.17 11.22 11.78 12.25 12.64 12.87 13.03 13.17	209 190 172 182 183 184 192 190 186 196	0.12 0.20 0.27 0.24 0.23 0.22 0.24 0.21 0.20
M-4 5 Aug 5		O EST th 43'	Weathe Wind S Air 26	E-2	M-4 6 Aug 5		O EST th 45'	Weather Wind S Air 25	- 2
Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)	Depth (ft)	Temp (°C)	Sal (0/00)	Cur Dir (°T)	rent Speed (kts)
0 5 10 15 20 25 30 35 40	28.12 28.13 27.84 27.89 27.62 27.08 26.12 26.00 25.66	10.96 11.02 11.15 11.18 11.43 12.02 11.91 12.66	355 356 187 188 189 188 187	0.19 0.12 0.00 0.11 0.12 0.17 0.20 0.24 0.16	0 5 10 15 20 25 30 35 40	27.78 27.89 27.75 27.73 27.46 26.56 25.96 25.92 25.66	11.10 11.07 11.14 11.20 11.45 12.18 12.69 12.76 12.97	240 190 170 180 172 161 162 169 179	0.45 0.29 0.58 0.67 0.53 0.50 0.41 0.29 0.26

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	i !	ľ	Cur	rent				Cur	rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)	Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Spec (kts
0	27.48	11.22	215	0.79	0 ;	27.70	11.07	189	0.43
5	27.50	11.15	196	0.73	5	27.76	11.09	178	0.48
10	27.39	11.29	193	0.57	10	27.74	11.10	186	0.45
15	27.31	11.27	193	0.41	15	27.60	11.25	189	0.34
20	27.07	11.60	194	0.45	20	26.98	11.72	188	0.22
25	26.37	12.30	186	0.34	25	26.65	12.00	183	0.18
30	25.87	12.80	175	0.41	3 0	26.06	12.54	000	0.00
35	25.67	12.95	164	0.22	<i>3</i> 5	25.95	12.63	321	0.26
30 35 40	25.49	13.11	··· ex	0.00	40	25.78	12.82	342	0.31
44	25.47	13.12	## ex	0.00	45	25.72	12.86	343	0.26

		' i	Cur	rent
Depth (ft)	Temp	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.78	11.09	216	0.76
5	27.67	11.20	191	0.58
10 .	27.66	11.20	176	0.58
15	27.26	11.49	176	0.50
20	26.96	11.83	176	0.31
25	26.67	12.05	186	0.22
30	26.37	12.30	166	0.18
35	25.86	12.72		0.00
40	25.58	13.02	356	0.18
45	25.44	13.15	356	0.34

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			Cur	rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.63	11.10	184	0.31
5	27.66	11.14	213	0.26
10	27.55	11.25	214	0.22
15	27.52	11.30	194	0.18
20	27.01	11.68		0.00
25	26.42	12.25		0.00
30	26.10	12.52		0.00
35	25.90	12.72		0.00
40	25.83	12.81	324	0.18
45	25.68	12.91	324	0.26

M-4 6 Aug 5	-4 0500 ES Aug 52 Depth 4		Weather 03 Wimd S-1 Air 26.1°C		
De-#h		g-3		rent	
Depth (ft)	(°C)	Sal (0/00)	Dir (°T)	Speed (kts)	
0	27.50	11.16		0.00	
5	27.60	11.17		0.00	
10	27.50	11.25		0.00	
15	27.46	11.33	~ ***	0.00	
20	27.00	11.72		0.00	
25	26.39	12.25		0.00	
30	26.18	12.45	337	0.18	
35	26.01	12.59	337	0.18	
40	25.82	12.80	337	0.18	
45	25.67	12.92	338	0.29	

M-4 6 Aug	M-4 0700 6 Aug 52 Dep		Weather Wind W Air 30	-1
Depth	Temp	Sal	Dir	rent Speed
(ft)	(°C)	(0/00)	(°T)	(kts)
0	27.24	11.27	357	0.26
5	27.35	11.27	359	0.26
10	27.39	11.30	330	0.29
15	27.34	11.32	330	0.34
20	27.14	11.50	329	0.38
25	27.04	11.61	330	0.38
30	26.74	11.85	329	0.34
35	26.38	12.16	328	0.31
40	25.98	12.57	307	0.31
45	25.68	12.75		0.00

M-4 6 Aug 5	060 2 De p	5 EST th 44'	Weather Wind S Air 27	-1
Depth	Temp	Sal	<u>Cur</u> Dir	rent Speed
(ft)	(°C)	(0/00)	(T°)	(kts)
0	27.49	11.15	205	0.22
5	27.46	11.15	195	0.36
10	27.49	11.25	340	0.31
15	27.51	11.27	335	0.26
20	27.23	11.48	340	0.26
25	27.03	11.73	305	0.34
30	26.39	12.29	349	0.34
35	26.04	12.57	359	0.36
40	25.90	12.70	354	0.34
45	25.78	12.80	333	0.22

M-4 080 6 Aug 52 Dep				Weather 03 Wind W-1 Air 30.6°C		
Depth Temp		S a 1	Current Dir Spec			
(ft)	(°c)	(0/00)	(°T)	(kts)		
0	27.44	11.28	307	0.34		
5 10	27.42 27.29	11.29 11.35	319 325	0.48		
15	27.31	11.37	294	0.29		
20 25	27.24 27.22	11.41 11.47	312 317	0.41		
3 0	27.14	11.54	318	0.31		
35 40	26.92 26.36	11.83 12.31	302 299	0.36		
45	25.58	12.94	290	0.26		

M-4 0900 6 Aug 52 Dept				.2°C
		Current		
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.56	11.22	353	0.24
5	27.46	11.27	312	0.21
10	27.48	11.28	330	0.29
15	27.38	11.30	339	0.26
20	27.28	11.39	338	0.20
25	27.14	11.54	347	0.19
30 i	27.08	11.58	346	0.14
35	26.76	11.84	346	0.12
40	25.72	12.80		0.00
45	25.57	12.92		0.00

M-4 1100 EST 6 Aug 52 Depth 45'			Weather 03 Wind SW-2 Air 30.0°C		
Depth (ft)	Temp (°C)	Sal (o/oo)	Cur Dir (°T)	Speed (kts)	
0 5 10 15 20 25 30 35 40 45	27.50 27.62 27.35 27.28 27.14 26.98 26.31 25.98 25.52 25.42	11.29 11.25 11.34 11.35 11.47 11.54 12.22 12.58 13.03 13.09	283 284 192 250 222 221 221	0.00 0.00 0.09 0.12 0.00 0.11 0.16 0.15 0.15	

M-4 6 Aug 5		DEST th 45'	Weather Wind S- Air 31	-2 i
	Current			
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)
0 5 10 15 20 25 30 35 40	27.72 27.55 27.54 27.47 27.28 27.12 26.80 26.16 25.74 25.70	11.24 11.30 11.31 11.33 11.42 11.00 11.94 12.41 12.85 12.88	340 318 320 315 302 272 258 175 177	0.30 0.17 0.14 0.24 0.28 0.23 0.17 0.12 0.12

M-4 6 Aug 5		DEST th 45'	Weather Wind St Air 28	SW-2
		are applied. Mate title: Adjabablik, pap hales publishes, ad	Cur	rent
Depth (ft)	Temp (°C)	Sal (0/00)	Dir (°T)	Speed (kts)
0	27.58	11.27		0.00
5	27.54	11.28		0.00
10	27.42	11.32	219	0.11
15	27.38	11.34	220	0.12
20	27.04	11.58	221	0.11
25	26.96	11.69	135	0.19
30	26.40	12.22	134	0.26
35	25.88	12.71	138	0.24
40	25.64	12.94	124	0.24
45	25.60	12.97	118	0.19

Section B

Chemical Data

Turbidity Mu 650m	' ! ! !	0.037	0.078	0.067	0.080	0.076 0.095 0.096 0.193	0.093 0.078 0.143	0.083	0.069 0.070 0.112
Turb		0.067	0.160	0.131 0.143	0.166	0.175 0.142 0.157 0.290	0.180 0.155 0.224	0.061	0.155 0.144 0.213
Alk. (mg at/L)	1,88 2,30 2,38	2.30 2.34 2.34 2.34	1.73	2.06 2.10	11	2.01 2.15 2.15 2.18	111	; ;	111
PO 14 (Mg at/L)	111	111	1 1	1 1	11	1111	111		111
Chloro. $(\mu g/L)$	111	111	11	1 1	; ;	1111	111	: 1	111
Hď	8.00 8.06 8.06	8.03 8.10 °.07	8,22 7,08	8.12 9.06	1 1	8.62 7.95 7.99 9.03	:::	1 1	111
(1/Tu)	3,65	3.62 3.49 3.62	4.16 2.36	4.33	4.35	4.14 3.14 2.91 2.59	4.71 3.99 3.92	3.87 1.86	3.43 3.70 5.36
Depth (ft)	10 30 50	10 30 50	10 30	20	10 30	10 20 20 20 20 20	13 33 53	10	07 04 04
Date	23 July 52	23 July 52	23 July 52	23 July 52	25 July 52	25 July 52	25 July 52	25 July 52	26 July 52
Station	657W	70lx	206	7097	723	724R	ध्यम्	74117	203F

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Es Capacidaria

Station	Date	Depth (ft)	(1/Lm)	Hď	$^{\tt Chloro.}_{(\mu g/L)}$	$\rho_{\rm O}^{\rm PO}_{\rm H}$	Alk. $(mg at/L)$	Turb 110m/k	Turbidity m/ 650m/
N40°	26 July 52	0 10 19	3.05 3.79 3.19		111	111	1 1 1	0.162 0.160 0.160	0.076 0.077 0.077
8123	4 Aug 52	20 30 35	3.96		111	111	6.99	111	111
812K	4 Aug 52	21	2,24		1		1		
9136	4 Aug 52	22	0,24 0,00	1 1		1 1	7.30	! !	
31.8N	26 July 52	10	4.15 3.28 0.00	: : :	111		111	0.191 0.167 0.251	0.098 0.077 0.132
934त	20 July 52	20 140 60	1.37 3.06 7.00 7.00	8.37 7.99 7.63 7.59	: : : :	1111	1,28 1,40 1,30 1,74	0.142 0.130 0.120 0.130	0.066 0.060 0.056 0.056
834G	26 July 5 2	10 30 50	3.96 7.97 7.00		; ; ;	111	111	0.191 0.162 0.126	0.107 0.076 0.060
934K	2 6 July 52	10 30 30 30	1, 1,1 3, 1,6	111	111	111		0.201 7.169 0.601	0.085 0.085 0.123
				†				min	Į

7.1) (vg/L) (vg at L) (mg at L) (hooped at L	Date	0	Depth		Ha	Chloro.		I N		I Turbidity	
9.6 7.98 1.008 0.055 1.17 0.225 0.086 0.086 0.005 7.39 0.055 1.52 0.190 0.086 0.005 7.39 0.055 1.52 0.190 0.086 0.005 0.005 1.52 0.190 0.086 0.005 0.005 0.005 0.006 0.006 0.006 0.006 0.005 0.006 0.0	(ft)	(ft)		(m1/L)	5 ,	(Ag/L)	(mg at/L)	$({\tt mg\ at/L})$	1	₩009	800m
000 7.442 0.520 0.120 1.76 0.104 0.048 0.001 0.018 1.79 0.202 0.021 0.021 0.037 0.018 1.79 0.202 0.021 0.021 0.031 0.903 0.903 0.124 1.80 0.202 0.021	19 July 52 0 20 20 10	0 50 10		5.02 3.36 1.39	8,12 7,98 7,37	2.096 1.008 7.650	0.030 0.065 0.055	1.47 1.52 1.54	0.225 0.190 0.340	0.086 0.086 0.181	0.068 0.070 0.131
7.36 0.505 0.125 1.79 0.205 0.081 7.38 1.692	100	100		6.00°	7.38	0.520 0.872 0.953	0,120 0,144 0,142	1.76 1.30	0.104	0.048 0.087 0.124	0.067 0.067 0.108
1. 8.04	COT	001		00.00	1.30	0,500	0.125	T• (9	0.205 110mm	0.08L	000.0
18 7.88 1.692 2.043 1.51 9.205 0.130 50 3.10 1.587 9.041 1.55 9.205 0.138 0.8 7.58 1.517 9.041 1.55 9.205 0.138 0.9 8.22 1.48 0.403 0.067 1.26 0.301 0.156 0.50 8.57 0.595 0.034 1.34 9.368 9.221 0.50 8.57 0.595 0.034 1.34 9.368 9.221 0.50 9.48 0.403 0.060 1.48 0.368 9.221 0.50 9.206 0.301 0.156 0.308 0.109 0.060 1.48 0.368 9.201 0.109 0.105 0.109 0.20 0.206 0.109 0.105 0.109	10 20 30 70	20 20 70 70 70		11111	8.04 7.90 7.82 7.82	11111	11111	11111	0.204	0.115	1
18 7.88 1.692 0.043 1.51 0.205 0.130 50 3.10 1.587 0.041 1.55 0.222 0.138 0.8 3.70 2.089 0.041 1.53 0.208 0.125 1.3 7.58 1.517 0.041 1.53 0.208 0.185 1.5 7.58 1.517 0.085 1.5 8.57 0.595 0.094 1.57 0.186 1.5 8.57 0.595 0.006 1.48 0.403 0.067 1.26 0.301 0.156 1.5 8.57 0.595 0.006 1.48 0.409 0.006 1.5 8.57 0.595 0.009 1.5 8.57 0.595 0.009 1.5 8.57 0.295 0.009 1.5 8.57 0.295 0.009 1.5 8.57 0.295 0.009 1.5 8.57 0.295 0.009 1.5 8.57 0.295 0.009 1.5 8.57 0.295 0.001									100me	у»шоо9	800aj
1. 18 0. 317 0. 214 0. 321 0. 322 0. 321 0. 322 0. 322 0. 322 0. 322 0. 322 0. 322 0. 322 0. 322 0. 322 0. 322 0. 322 0. 323 0.	17 June 52 0 10 20 30	20 CS 30 S		4.18 4.50 4.03 3.13	7.38 3.10 3.00 7.58	1.692 1.587 2.089 1.517	0.043 0.041 0.041 0.041	44.44 44.44 44.44 44.44	0.205 0.222 0.208 0.277	0.130 0.138 0.125 0.185	0.102 0.109 0.096 0.155
4.22 1.48 0.347 0.214 9.12 1.56 0.422 0.283 7.92 1.56 0.481 0.283 10 8.48 0.403 0.067 1.26 0.301 0.156 59 8.57 0.595 0.034 1.34 0.172 55 0.23 0.060 1.48 0.368 0.172 39 7.99 1.50 0.206 0.109 63 7.80 1.55 0.195 0.101 22 7.79 1.59 0.436 0.250						-			410m	650m	
10 8.48 0.403 0.067 1.26 0.301 0.156 59 8.57 0.595 0.034 1.34 0.317 0.172 55 0.23 0.527 0.060 1.48 0.368 0.221 39 7.99 1.50 0.206 0.109 63 7.80 1.59 0.101 22 7.79 1.50 0.250	16 June 5? 0 10 29	350		111	9.22 9.12 7.92	;;;	111	1.48	0.347 0.422 0.481	0.283 0.321 0.321	
40 8.48 0.403 0.067 1.26 0.301 0.156 59 8.57 0.595 0.034 1.34 0.317 0.172 55 0.23 0.527 0.060 1.48 0.368 0.172 50 0.195 0.109 51 7.80 1.50 0.195 0.101 52 7.79 1.50 0.250				-			1		100mp	600m	800mg
39 7.99 1.50 0.206 63 7.80 1.55 0.195 22 7.79 1.59 0.436	15 June 52 0 10 20	028		4.55 4.55 5.59 5.59	8.52 8.57 23	0.403 0.595 0.527	0.067 0.034 0.060	1.26 1.34 1.48	0.301 7.317 0.368	0.156 0.172 0.221	0.115 0.131 0.181
39 7.99 1.50 0.206 63 7.80 1.55 0.195 22 7.79 1.59 0.436									110mg	650m/	
	22 July 52 0 10 25	0 10 25		4.39 3.63 3.22	7.99	111	111	1,55	0.206 0.195 0.436	0.109 0.101 0.250	

Station	Date	Deoth (ft)	(m1/L)	Hď	Chloro. (Ag/L)	M at/L)	Alk. (mg at/L)	T. 410m	Turbidity 650m
J-24	22 July 52	20 70 80 80	1,15 3,29 3,28 3,28 3,58	7.50 7.50 7.48 7.19	1111	1111	1.15	11111	1111
J43	20 July 52	0 10 30	4.26 3.54 3.11	8.23 7.68 7.48	111	111	1.08	0.492 0.620 1.149	0.270 0.377 0.717
7 µ	5 Aug 52	0 10 20 40	1, 24 3, 76 3, 00 0,00	8.21 8.09 7.96 7.63	. 521 1.708 . 495 . 548	0.11 0.10 0.15	1.57 1.55 1.59 1.71	0.250 0.207 0.257 0.224	0.123 0.119 0.119 0.130

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